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**REMARKS/ARGUMENTS**

This application has been reconsidered carefully in light of the Office Action dated as mailed on 08 December 2006. A careful reconsideration of the application by the Examiner in light of the foregoing amendments and the following remarks is respectfully requested.

5                    This response is timely filed as it is filed within the three (3) month shortened statutory period for response to the outstanding Office Action.

                    This response is also accompanied with a check and/or authorization to charge deposit account for any additional claim fee due as a result of this Amendment because either the number of independent claims exceeds the number of independent  
10                    claims for which fees have previously been paid, the total number of claims exceeds the total number of claims for which fees have previously been paid, or both.

**Request for Telephone Interview**

                    In the event the amendments and remarks herein presented are not initially deemed sufficient to place this patent application in condition for allowance,  
15                    Applicants kindly request the Examiner to contact the undersigned at (847) 490-1400 to schedule a telephone interview, to discuss the merits of this Patent Application.

**Amendment to the Specification**

                    By the above, the specification has been amended to delete a sentence that on the further review of the application was found to be inaccurate. In particular,

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the deleted sentence misidentified volatilizing solvents as decomposing blowing agents. Solvents, such as the listed "acetone", do not constitute blowing agents in accordance with the invention. Thus, consistent with the Example appearing at pages 26 and 27 of the Application wherein the inclusion of a blowing agent and acetone are separately identified, the misidentification of solvents as blowing agents has been deleted. No new matter has been added to the application by such deletion.

#### **Amendment to the Claims**

By the above,

1. independent claims 1 and 21 have each been rewritten to require that the respectively claimed foamable igniter compositions include a thermally decomposable blowing agent effective upon decomposition to render the foamable igniter composition porous;

2. claim 8 has been cancelled without prejudice; and

3. claims 29 and 30 have been added to more fully and completely claim the disclosed subject matter.

The incorporation and use of thermally decomposable blowing agents effective upon decomposition to render the claimed foamable igniter compositions porous (as now required by claims 1 and 21, respectively) finds support throughout the originally filed application such as in original claim 8 and at page 12, line 12 through page 13, line 4, for example.

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In view of underlying claim 1 having been so rewritten, claim 8 has been cancelled without prejudice.

Newly added claims 29 and 30 each require that the thermally decomposable blowing agent is a solid. Such added claims find support throughout the originally filed application such as at page 12, line 12 through page 14, line 2, for example. No new matter has been added to the claims by this Amendment.

#### **Election/Restrictions**

While the Action asserts that the traversal to the preceding restriction requirement was on the ground(s) that a composition is not a product, that was **NOT** the basis of the traversal. Rather, the traversal was on the basis that the Action had misidentified the subject matter and/or nature of the claims. More specifically, while the Action had asserted that inventions I and II were related as process of making and product made, claims 1-15 and 21-28 (the claims the Action had identified as constituting invention I) are directed to an igniter composition and claims 16-20 (the claims the Action had identified as constituting invention II) are product-by-process claims and are directed to a product made from the igniter composition of invention I, thus inventions I and II are directed to related products. The method claims of invention II are directed to a method of making a **foamed** igniter substance. The method claims of invention II are not directed to a method of making the **foamable igniter composition**, claimed in the claims of invention I.

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In view of the above, reconsideration of the previously made traversal to the restriction requirement is requested.

The Action has identified that claims 12, 13 and 15-20 have been withdrawn from further consideration and the balance of this response is based on such withdrawal.

Claims 1-30 remain in the application with claims 12, 13 and 15-20 having been withdrawn from further consideration.

#### **Claim Rejections - 35 U.S.C. § 102**

1. **Claims 1-5 and 7-10 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 3,697,455 to Spenadel et al. (hereinafter "Spenadel")**

The rejection of claim 8 is moot in view of the above cancellation of claim 8. Claim 1 is an independent claim with claims 2-5, 7, 9 and 10 dependent thereon. The rejection of these claims on this basis is respectfully traversed.

The Action asserts that Spenadel discloses:

a composition that comprises Viton A, blowing agent, solid fuel such as magnesium, plasticizer, and curing/crosslinking agent (col. 1, lines 34-42 and lines 69-72; col. 4, lines 20-31, and Recipe table. The composition is heated to form a porous structure (see examples). It is also disclosed that a known blowing agent is sodium bicarbonate (example 1).

The Examiner has failed to recognize that Spenadel does not disclose or teach the use of sodium bicarbonate as a blowing agent in the Spenadel composition. In fact, Spenadel expressly teaches:

Thus, for the purpose of the present invention the blowing agent should contain 3 to 10 carbon atoms and have a boiling point above 70° C. but not more than 200° C., the upper limitation being governed by the maximum cure temperature. [See column 2, lines 26-30.]

The Recipe table appearing in Example 1 to which the Action refers lists the components of the example composition. Such list of components include n-Octane. Sodium bicarbonate is not included in the "recipe" shown in Example 1.

Thus, the Office Actions's proposed inclusion or use of sodium bicarbonate blowing agent in or with the "recipe" of Spenadel is clearly contrary to the expressed teachings of Spenadel.

Moreover, by the above, claim 1 now specifically requires that the claimed foamable igniter composition include "a thermally decomposable blowing agent effective upon decomposition to render the foamable igniter composition porous". The blowing agents of Spenadel are not so thermally decomposable but instead volatilize when subjected to sufficient heat.

Spenadel fails to show or suggest a foamable igniter composition that includes a thermally decomposable blowing agent effective upon decomposition to render the foamable igniter composition porous, as claimed.

5 Additionally, while the Action includes some generalized statements regarding claim clauses being “essentially method limitations or statements of intended or desired use” and thus “do not serve to patentably distinguish the claimed structure over that of the reference”, the Action fails to specifically identify which clauses and which claims these generalized statements are alleged to pertain. For example, while the action refers to “adapted for” language, a word search of the examined claims revealed that the word “adapted” has not been used in those claims.

10 The Action further lists several case citations, including: *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458 and *Ex parte Masham*, 2 USPQ 2nd 1647, as support for the proposition that selected claim clauses are not be given patentable weight.

15 In response to such assertion, it is respectfully noted that it is well settled that an Examiner must consider functional language when evaluating the patentability of the claimed subject-matter in-view of the teachings of the prior art. *Lewmar Marine v. Barient*, 3 USPQ2d 1766 (Fed. Cir. 1987). Furthermore, the “adapted to” characterization in a claim imposes a limitation that cannot be ignored when considering patentability. *Pac-Tec v. Amerace*, 14 USPQ2d 1871

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(Fed. Cir. 1990); *Ex parte Conner*, 215 USPQ 384 (BPAI 1981); *In re Venezia*, 189 USPQ 149 (CCPA 1976).

Though the Action states that “these clauses are essentially method limitations or statements of intended or desired use” and these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference” (emphasis added), it is noted that the rejected claims are each directed to gas generant compositions, not structures.

With regard to the cases identified above and cited in the Action, the following is noted:

1. *In re Yanush*; *In re Finsterwalder* and *Ex parte Masham* each involved apparatus claims, not composition claims;
2. *In re Otto* involved article of manufacture and method of making claims, not composition claims. Moreover, the method of making claims were in fact examined for functional limitations;
3. *In re Casey*, cited in the Action as at 512 USPQ 235, could not be located. Upon the proper identification of a proper and appropriate cite, the case will be appropriately reviewed and considered;
4. None of *In re Pearson*; *In re Yanush*; *In re Finsterwalder*; *In re Otto* and *Ex parte Masham* involve the use of a “wherein” clause and

5. *In re Pearson* is the only one of the listed cases with composition claims but even there the Board specifically stated:

**We do not mean to imply that terms which recite the intended use or a property of a composition can never be used to distinguish a new from an old composition. *In re Pearson*, 181 USPQ 641, 644. [Emphasis added.]**

In view of the above, the Examiner is requested to reconsider the proposition that selected claim clauses are not to be given patentable weight. Moreover, should on further review the Examiner maintain a position that any of the limitations in the pending claims are not to be given patentable weight, the Examiner is hereby and expressly requested to specifically identify the claim limitation not to be given patentable weight so as to allow the Applicant to specifically address the particulars of any such assertion. In addition, in view of the above statements regarding the various cases cited in the Action should on further review the Examiner maintain a position that any of the limitations in the pending claims are not to be given patentable weight, the Examiner is specifically requested to identify proper basis for such assertions relative to the pending claims.

Based on the above, the rejections of claims 1-5, 7, 9 and 10 as anticipated by Spenadel are improper and/or overcome and notification to that effect is solicited.



**Claim Rejections - 35 U.S.C. §102/103**

2. **Claims 21, 22 and 24 were rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over Spenadel.**

5 Claim 21 is an independent claim with claims 22 and 24 dependent thereon. The rejection of these claims on this basis is respectfully traversed.

The Remarks presented above relative to the rejection of independent claim 1 and certain of the claims dependent thereon based on Spenadel appear herein applicable and are here incorporated.

10 For example, as submitted above the Examiner has failed to recognize that Spenadel does not disclose or teach the use of sodium bicarbonate as a blowing agent in the Spenadel composition. The Recipe table appearing in Example 1 to which the Action refers lists the components of the example composition. Such list of components include n-Octane. Sodium bicarbonate is not included in the “recipe” shown in Example 1.

15 Thus, the Office Actions’s proposed inclusion or use of sodium bicarbonate blowing agent in or with the “recipe” of Spenadel is clearly contrary to the expressed teachings of Spenadel.

20 Also, claim 21 (similarly to claim 1) now specifically requires that the claimed foamable igniter composition include “a thermally decomposable blowing agent effective upon decomposition to render the foamable igniter composition

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porous". The blowing agents of Spenadel are not so thermally decomposable but instead volatilize when subjected to sufficient heat.

Spenadel fails to show or suggest a foamable igniter composition that includes a thermally decomposable blowing agent effective upon decomposition to render the foamable igniter composition porous, as claimed.

The Action, under this basis of rejection, also appears to repeat the above-discussed generalized statements regarding certain claim clauses. The above comments thereregards are herein incorporated.

Furthermore, should on further review the Examiner maintain a position that any of the limitations in the pending claims are not to be given patentable weight, the Examiner is hereby and expressly requested to specifically identify the claim limitation not be given patentable weight so as to allow the Applicant to specifically address the particulars of any such assertion. In addition, in view of the above statements regarding the various cases cited in the Action, the Examiner is also requested to identify proper basis such assertions relative to the pending claims.

In any case, as submitted above, the rejections of claims 21, 22 and 24 as anticipated by or in the alternative obvious over Spenadel are improper and/or overcome and notification to that effect is solicited.

3. **Claims 6 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spenadel as applied to claims 1-5, 7-10, 21, 22 and 24 above, and further in view of U.S. Patent 2,748,098 to Passino (hereinafter "Passino")**

The rejection of these claims on this basis is respectfully traversed.

Claim 6 is dependent on claim 1. Claim 23 is dependent on claim 21.

As the proposed combination of Passino with Spenadel does not overcome the shortcomings discussed above regarding the rejections of claims 1 and 21 based on Spenadel, the withdrawal of the rejections of claims 6 and 23 based on the proposed combination of Spenadel with Passino is respectfully requested.

4. **Claims 11 and 26-28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spenadel as applied to claims 1-5, 7-10, 21, 22 and 24 above, and further in view of U.S. Patent 3,663,323 to Engel et al. (hereinafter "Engel")**

The rejection of these claims on this basis is respectfully traversed.

Claim 11 is dependent on claim 1. Claims 26-28 are dependent on claim 21. As the proposed combination of Engel with Spenadel does not overcome the shortcomings discussed above regarding the rejections of claims 1 and 21 based on Spenadel, the withdrawal of the rejections of claims 11 and 26-28 based on the proposed combination of Spenadel with Engel is respectfully requested.

5. **Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Spenadel as applied to claims 1-5, 7-10, 21, 22 and 24 above, and further in view of U.S. Patent 5,911,904 to Shih et al. (hereinafter "Shih")**

The rejection of claim 23 on this basis is respectfully traversed.

5 Claim 23 is dependent on claim 21. As the proposed combination of Shih with Spenadel does not overcome the shortcomings discussed above regarding the rejection of claim 21 based on Spenadel, the withdrawal of the rejection of claim 23 based on the proposed combination of Spenadel with Shih is respectfully requested.

10 On further review of the Action, it appears that the subject rejection may have been intended to have been applied to claim 25, not claim 23. However, as submitted above, the use of sodium bicarbonate as a blowing agent in the Spenadel composition is clearly contrary to the teachings in Spenadel. The Action has failed to identify any proper motivation for the use of p-toluene sulfonyl semicarbazide as  
15 the blowing agent, as required by claim 25, in the composition of Spenadel.

6. **Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over Spenadel as applied to claims 1-5, 7-10, 21, 22 and 24 above, and further in view of U.S. Patent 4,758,287 to Pietz (hereinafter "Pietz")**

20 The rejection of claim 14 on this basis is respectfully traversed.

Claim 14 is dependent on claim 1. As the proposed combination of Pietz with Spenadel does not overcome the shortcomings discussed above regarding

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the rejection of claim 1 based on Spenadel, the withdrawal of the rejection of claim 14 based on the proposed combination of Spenadel with Pietz is respectfully requested.

Moreover, claim 14 is directed to a damper pad cushion for use in an automotive airbag inflator. Claim 14 requires that the foamable igniter composition of claim 1, upon being heated to a predetermined temperature at a select pressure in a mold having a desired shape, forms a foamed damper pad cushion.

Pietz is entitled, "POROUS PROPELLANT GRAIN AND METHOD OF MAKING THE SAME." The Action fails to identify any disclosure in Pietz directed to the making of a foamed damper pad cushion, as required by claim 14.

Thus, Claim 14 is believed to be further patentable thereover.

#### **Withdrawn Claims**

Claim 1 is believed to be generic such that upon the allowance of thereof, Applicants are entitled to consideration of those claims to additional species which are written in dependent form. As withdrawn claims 12, 13 and 15-20 are dependent on claim 1, these previously withdrawn claims are also believed to be in condition for allowance and notification to that effect is solicited.

#### **Newly Added Claims**

Claims 29 and 30 have been added. Claims 29 and 30 each require that the thermally decomposable blowing agent is a solid.

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As the primary reference (Spenadel) teaches the use of liquid blowing agents, claims 29 and 30 are believed to be further patentable over the art of record and notification to that effect is solicited.

### **Conclusion**

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In view of the above, all pending claims are believed to be in condition for allowance and notification to that effect is solicited. However, should the Examiner detect any remaining issue or have any question, the Examiner is kindly requested to contact the undersigned, preferably by telephone, in an effort to expedite examination of the application.

Respectfully submitted,



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